



# Supplier Responsibility 2016 Progress Report



# There's a right way to make products. It starts with the rights of the people who make them.

Our suppliers employ more than 1.6 million people in 20 countries. And every one of those people deserves to be treated with dignity and respect. In our tenth annual Supplier Responsibility Report, we're sharing the latest steps we've taken to create fair employment and safe working conditions throughout our supply chain.



# Contents

Page 4 A letter from Jeff Williams

Page 5 Accountability

The Apple Supplier Code of Conduct  
Every audit is an opportunity to improve  
Case Study: Improving factory conditions in Liuyang

Page 10 Labor & Human Rights

Workers shouldn't have to go into debt to earn a paycheck  
Case Study: Freeing Rechel Ragas from bonded labor  
Childhood should not be spent in a factory  
Working too many hours isn't just unfair, it's unsafe  
Changing the landscape of mineral mining  
Safer tin mining in Indonesia

Page 15 Empowering Workers

On-the-job training should begin with understanding one's rights  
It's about more than jobs. It's about opportunities  
Case Study: Carl Yang turns a job into a career  
Raising the standard of education

Page 19 Environment, Health and Safety

Manufacturing with the world in mind  
Making products with fewer by-products  
Case Study: Keeping waste out of landfills  
Making water-intensive processes more water conscious  
Safer facilities start with a specialized curriculum  
Case Study: Increasing Safety at Marian Suzhou  
Keeping restricted chemicals out of manufacturing processes and away from people  
Everyone should be prepared for emergencies  
Case Study: Fire prevention at Ri Teng  
Safety equipment is a worker's most important tool

Page 27 Audit Results

Audit Scores  
Compliance Scores

# A letter from Jeff Williams.

At Apple, we are deeply committed to making sure everyone in our supply chain is treated with the dignity and respect they deserve. Our team works hard to raise the bar every year to improve working conditions, provide educational opportunities, push for higher standards of living, and protect human rights.

2016 marks our tenth annual Supplier Responsibility Report. It details the strides Apple has made in protecting human rights by stemming excessive work hours and addressing bonded and underage labor practices. It also provides a window into our efforts to preserve the environment through safe chemical use, conservation of natural resources, energy efficiency, and renewable energy.

In 2015, work-hour compliance among our suppliers has reached 97 percent, a number that is virtually unheard of in our industry. Since 2008, more than 9.2 million workers have been trained on their rights, over 1.4 million people have participated in Apple educational programs, and more than US\$25.6 million in excessive recruitment fees have been repaid to foreign contract workers by suppliers as a result of our efforts.

Apple's push for more rigorous environmental standards and renewable energy production has delivered substantial results: Suppliers have diverted more than 73,000 metric tons of waste from landfills. Our Clean Water Program has saved more than 3.8 billion gallons of freshwater. And in the first year of our energy efficiency program, suppliers have prevented more than 13,800 metric tons of carbon emissions. We aren't just helping suppliers become more efficient — our Clean Energy Program is supporting them in powering their facilities with renewable energy sources. And our Environment, Health, and Safety (EHS) Academy participants have launched more than 2400 EHS projects since 2013.

We're proud of the progress we've made so far. Yet even as you read this, Apple continues to address challenges throughout the supply chain. We are openly working with industry partners, governments, NGOs, and others who share our vision of improving lives and caring for the environment.

At the heart of this effort is Apple's responsibility to the people who help make our products. Our commitment to them will never waver, and we will always try to do what is right by doing more and doing it better.

Jeff Williams  
Chief Operating Officer



Jeff Williams is Apple's Chief Operating Officer reporting to CEO Tim Cook. Since 2010, Jeff has overseen Apple's entire supply chain, service and support, and the social responsibility initiatives that protect more than one million workers worldwide.





Third-party auditors conduct wastewater testing at a factory in Kunshan, China.

## Accountability

# We set high standards, then help our suppliers meet them.

Our Supplier Code of Conduct is one of the strictest in the industry. But we do more than just hold our suppliers accountable to these standards — we work with them and provide the support they need to operate responsibly.

## The Apple Supplier Code of Conduct.

Our Supplier Code of Conduct outlines our high standards for creating safer working conditions, treating workers fairly, and using environmentally responsible practices. It's one of the strictest in our industry and often requires practices above and beyond local law. To comply with the Code of Conduct, all suppliers must meet the stringent requirements in our Supplier Responsibility Standards. This document details the standards that we expect our suppliers to meet regardless of local laws, company policies, cultural norms, and business practices around the world.



Download the [2016 Code of Conduct and Supplier Responsibility Standards](#) here.



An Apple engineer observes internal component work in Shanghai, China.

# Every audit is an opportunity to improve.

We use audits to build the capabilities of our suppliers. So we've developed a four-stage process to help them comply with our Code of Conduct.

## ① Audit Prioritization

We use a risk-based approach to decide which suppliers to audit. We consider issues like the social, environmental, health and safety, and business risks of a facility. Then we prioritize audits based on geographic risk, commodity risk, planned spending, and previous audit performance.

We look at concerns brought to us by external stakeholders such as nongovernmental organizations (NGOs), by internal Apple teams, and through anonymous complaint systems that encourage workers to report workplace violations and retaliations to us. Each request is assessed according to its urgency. If the issue is life threatening, we dispatch Apple teams immediately. Otherwise, our teams are usually onsite within 24 hours.



Auditors assess a final assembly facility in Jundiaí, Brazil.

---

21

unannounced audits performed.

---

250

requests closed for environment, safety, and labor cases

---

25k

follow-up interviews conducted to ensure no retaliation against workers

## ② Onsite Audit

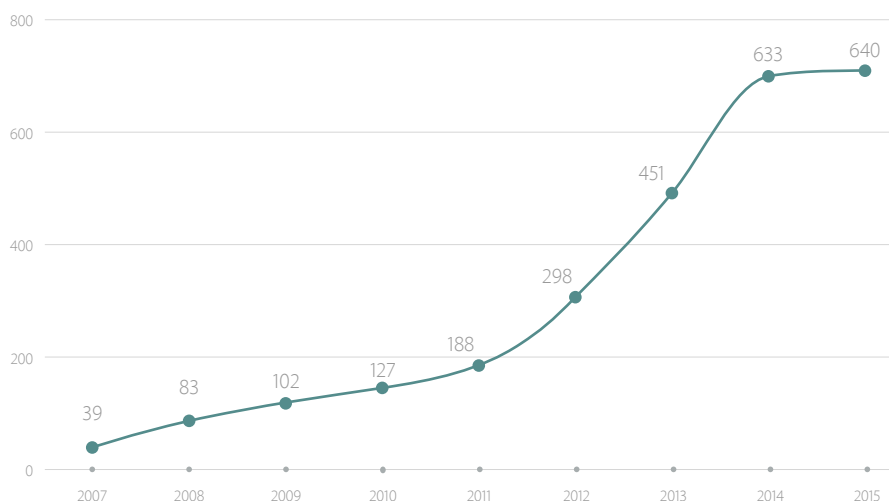
Every audit is led by Apple and supported by local third-party experts who have been trained on our auditing protocols. Together we interview workers, review hundreds of payroll documents, physically assess the health and safety conditions of the facilities, and inspect environmental conditions inside and out. Each facility is graded on more than 500 data points corresponding to the Code of Conduct.

While evaluating the facilities, we're also seeking out core violations — issues for which Apple has zero tolerance. These include cases of underage workers or involuntary labor, document falsification, intimidation of or retaliation against workers participating in audits, working conditions that put lives at risk, and significant environmental impacts. Any breach we find is escalated to senior management at Apple and the supplier to be addressed immediately. In some cases these violations are also reported to local authorities. Noncompliant suppliers are then placed on probation until they successfully complete their next audit. Core violations negatively affect the suppliers' business relationships with Apple and can lead to termination. To date, we've ended contracts with 20 suppliers.

## ③ Addressing Issues

Noncompliant suppliers must submit a Corrective Action Plan within two weeks of the audit, outlining how they will fix the problems we found. Our team of verification specialists then works with suppliers, checking in at 30, 60, and 90-day intervals to make sure they're on track. Any delayed progress is escalated to senior management.

### Annual Apple Audits





Apple audits a supplier in Harrodsburg, Kentucky.

#### ④ Verifying Improvement

After 120 days, third-party auditors visit the facility to confirm that everything in the original Corrective Action Plan was implemented according to our standards. If not, we schedule a second verification audit within 30 days.

When suppliers require extra support to comply with the Code of Conduct, we send our team of experts as part of our partnership program. We tailor our approach to help the facility improve through refining business practices and management systems relating to labor, human rights, environment, and health and safety.

By working with our suppliers instead of only policing them, we have improved their compliance significantly.



## Case Study

# Improving factory conditions in Liuyang.

Lens, a factory in Liuyang, China, produces cover glass for iPhone, iPad, and Apple Watch.

When Apple first audited the factory in 2010, auditors discovered 57 labor and human rights, environment, and health and safety violations. They included uncontrolled working hours, age discrimination during recruiting, and chemical and hazardous waste management that didn't meet Apple's standards. Instead of penalizing the factory, we partnered closely with management to help improve conditions for their 35,000 workers.

"I work for Apple, but Lens and I work as a team. I encourage them to drive their own self-development."

Nikko Liao, Supplier Responsibility Specialist



Nikko, an Apple auditor, meets with the factory's HR team about human rights findings.

Nikko Liao, an auditor from Apple, was sent to change things from the inside.

Nikko focused on establishing a responsibility team and management system to implement new policies, procedures, and tools to drive internal improvement. These included new ways of controlling work hours, a revised internal audit procedure, an updated recruiting policy, and improved labeling and storage of chemicals.

As a result, the Lens team addressed all the violations from the 2010 report, improved their audit score by 29 percent, and continues to work toward their long-term goals of embedding responsible practices within their working culture.



A worker assembles Mac Pro in Austin, Texas

## Labor & Human Rights

# Workers' rights are human rights.

We make sure every person who works in our suppliers' facilities is treated fairly. So we partner closely with suppliers to end bonded labor, underage labor, and excessive work hours. We're also going deep within our supply chain to make sure our materials are sourced responsibly.

## Workers shouldn't have to go into debt to earn a paycheck.

Bonded labor occurs when workers pay recruitment fees before they start receiving a salary, which can push them into debt. In Asia, some workers travel across the continent looking for higher wages and can be misled by corrupt job brokers into paying these unjust costs.

We do not tolerate unfair recruitment fees. In fact, when we discover cases of bonded labor, we make suppliers repay the employees the recruitment fees in full whether or not the suppliers were directly involved in the recruiting process. This has resulted in over US\$25.6 million repaid to workers since 2008, including US\$4.7 million in 2015 alone. We also audit 100 percent of our top 200 facilities at risk for bonded labor and conducted 69 special investigations in 2015.

To help workers avoid corrupt hiring practices, we partnered with the International Organization for Migration (IOM) to create a program that educates workers before they leave home. Sessions cover a range of topics including workers' rights and responsibilities, contract terms, the culture of their new country of employment, and how to report illegal practices and abuse. Because we want to improve the lives of as many people as we can, we are sharing this content with other companies and suppliers through the [Electronic Industry Citizenship Coalition \(EICC\)](#).

---

\$25.6M

reimbursed from our suppliers to workers for excessive recruitment fees since 2008.

## Case Study

# Freeing Rechel Ragas from bonded labor.

Rechel Ragas grew up in an impoverished farming family in the Philippines. To help make ends meet, she sold candy and planted rice with her father. Her parents couldn't afford to pay for an advanced education, so she worked her way through college.



Rechel Ragas in Tainan, Taiwan.

When Rechel got married, she and her husband wanted to have a child and build their dream home. But even with a college degree, many jobs in her home country didn't pay enough to support the future she wanted. So she started seeking work elsewhere.

Taiwan has salaries twice as high as the Philippines. But to secure a factory position there, Rechel had to use a job broker agency that charged her more money than she made in an entire year working in her home country. The broker found her a position at Mektex, a company that is part of Apple's supply chain. Even though the fees Rechel paid were in compliance with local laws, they were beyond Apple's standards for workers. So Apple alerted Mektex and they immediately agreed to reimburse Rechel all the recruitment fees. They also terminated their relationship with the broker.

Because of the reimbursement, Rechel was able to save enough money to make a down payment on construction of their dream home, as well as return to the Philippines six months earlier than she'd originally planned. Eventually, she wants to save enough to put her brother through college.

## Childhood should not be spent in a factory.

We do not tolerate underage labor in our supply chain. If we find underage workers in our suppliers' factories, we make the suppliers return the children to their homes, pay for their education at a school of their family's choice, and continue to provide income for basic needs until they reach the legal working age. We also enlist a third-party organization to monitor the children's progress and report back to us. After they complete their education, suppliers must offer them reemployment. In 2015, we found three cases of underage labor — and we will continue to look for it.

## Working too many hours isn't just unfair, it's unsafe.

Working excessive hours is an issue that's endemic to the entire manufacturing industry. Across our supply chain, we limit work to no more than 60 hours a week with a mandatory day of rest once every seven days. But simply setting boundaries doesn't solve this problem. With the help of a work-hour tracking tool and weekly reporting, we've been able to work with suppliers and the business partners who own those relationships to make changes in real time. In 2015, this system allowed us to achieve 97 percent compliance across all workweeks, with full-time employee hours averaging 55 hours per week.

“Regarding the 60-hour workweek, we train our staff to remain educated on our policies, work with vendors to stay on target, and incorporate the standard into all of our manufacturing planning.”

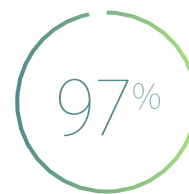
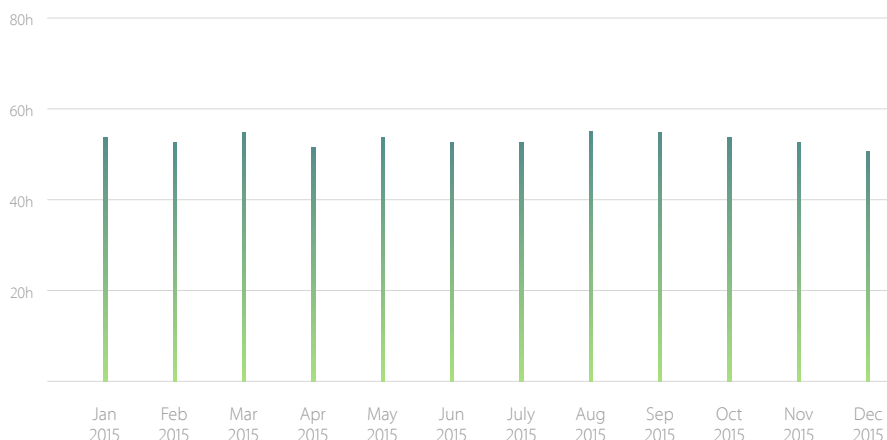
Greg Harbin, Manufacturing Design, Apple Operations



A worker inspects an iPhone at a final assembly facility in Zhengzhou, China.

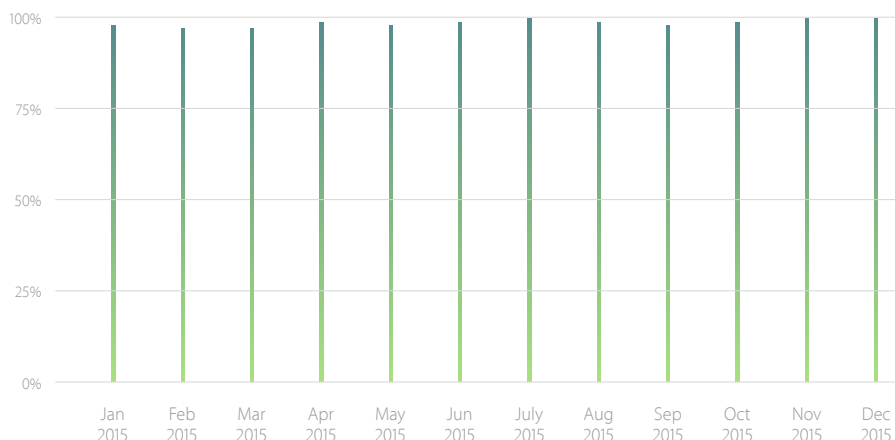


## Supplier work-hour compliance: Average hours



Supplier compliance with our 60-hour workweek in 2015, a 5 percent increase from 2014.

## Supplier work-hour compliance: Work-hour compliance



## Changing the landscape of mineral mining.

Apple is committed to responsible sourcing, and is working to ensure that minerals used in our products — like tin, tantalum, tungsten, and gold — do not finance armed conflict. We believe that instead of stopping suppliers from sourcing in these regions, it is imperative to work with them to bring change.

In December 2015, after five years of devoted effort, 100 percent of the identified smelters and refiners in Apple's supply chain for current products were participating in an independent third-party conflict minerals audit program. These audit programs have improved sourcing practices for smelters and the mining industry as a whole.

While this is an important milestone, and may be viewed by some companies as grounds to declare their products "conflict free," we believe participation in third-party audit programs alone is not enough. Ongoing engagement is critical, because some smelters that have completed third-party audits have minerals that are supplied by mines allegedly involved with armed groups. Recent improvements in regional monitoring and reporting provide Apple and other stakeholders with greater insight and the ability to investigate conditions in the mineral supply chains



Tin

Tantalum



Tungsten

Gold

Metals that may finance or benefit groups associated with human rights violations are called conflict minerals.

of the Democratic Republic of Congo. In 2016, we plan to continue improving conditions by enhancing due diligence in the gold supply chain. And we intend to report incidents related to armed groups wherever they apply to our supply chain, and seek resolution with the appropriate authorities.

Our goal of creating permanent change in the minerals sector will require contributions from many organizations. So we're furthering our partnerships with like-minded companies, engaging with key nongovernment and government parties, and working with third-party audit program owners to achieve the ultimate objective of protecting human rights in the region.

We continue to publish a [semi-annual list](#) of the names, countries, and Conflict-Free Smelter Program (CFSP) participation status of the smelters and refiners in our supply chain.

## Safer tin mining in Indonesia.

Years ago, we discovered that many small-scale tin mines in Indonesia were operating with practices that put workers' safety at risk. We also found that unsustainable mining practices were polluting the ocean and soil that are crucial to local communities. To change conditions in these mines, we spearheaded formation of the Tin Working Group — a partnership with IDH, the Sustainable Trade Initiative, the industry group ITRI, the NGO Friends of the Earth, and companies that use tin.

In 2015, Apple and the Tin Working Group conducted investigative research on the ground, and worked with civil society organizations and mining companies to define a five-year regulatory reform strategy of tin mining best practices. Together we are also drafting standards and guidelines to help buyers of tin identify responsible sources in the global marketplace.

The Indonesian government is now evolving its own policies for tin production and the environmental impacts of mining. This includes revising guidelines for operating a tin mine with a legal business license and revoking tin licenses of organizations that don't comply. While this is an important first step, Apple plans to continue working with the government and tin industry stakeholders to support responsible mining practices in Indonesia.



Our [Conflict Minerals Standard](#) and [Conflict Minerals Report](#) provide even more in-depth information about our responsible sourcing efforts.



A worker in Indonesia oversees the tin separation process.



Students attend a class about zero waste initiatives in Shenzhen, China.

## Empowering Workers

# Preparing people for the workplace and beyond.

Workers may not have access to a quality education in some countries where our products are made. So we provide training in factories to help workers be better informed, offer classes to help them take the next steps in their careers, and partner with vocational schools to increase the standard of education.

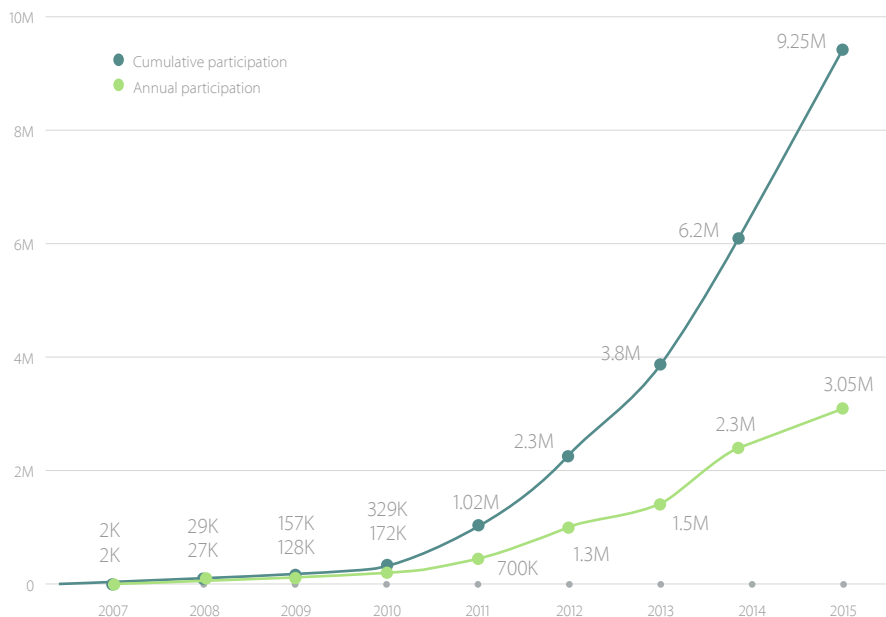


A SEED iPad class in Shenzhen, China.

## On-the-job training should begin with understanding one's rights.

Since 2008, our suppliers have trained over 9.25 million workers to understand local laws, health and safety regulations, and the Apple Code of Conduct. We require factory supervisors to uphold appropriate employment policies and maintain a safe workplace, and we teach them how to better communicate with workers.

### Participation in Workers' Rights Training



## It's about more than jobs. It's about opportunities.

We want workers to be successful in our factories, but we also want to help them explore new opportunities. That's why we developed the Supplier Employee Education and Development (SEED) program. We set up classrooms in supplier facilities where workers can take free courses in subjects as diverse as computer skills, graphic design, English, and human resources management. Each classroom is equipped with Mac computers and video conferencing capabilities, and we provide iPad devices pre-loaded with classes similar to those offered through SEED. We also offer short courses and quizzes on mobile devices related to job function, life skills, and financial literacy. This year, many SEED participants earned bachelor's or associate's degrees in partnership with local universities.

1.4M

SEED participants since 2008, including 558,692 participants in 2015.



## Case Study

# Carl Yang turns a job into a career.

Soon after Carl Yang graduated from junior vocational school, he started working as a material operator in the Jabil Suzhou factory. After three years of working on the production line, he was ready for a new challenge. Then one day he saw a notice for the SEED program and applied for the human resources management program, a field that had interested him for a long time.

Over the next nine months, Carl attended human resources classes. He devoted his spare time to his studies until he earned his high school diploma specializing in human resources. He did so well in the course interviews and performance assessments that he earned a position on the HR team as a SEED administrator.

In his new role, Carl provides technical support on classroom iPad devices and iMac computers and course guidance to workers entering the SEED program. And driven by a newfound passion for his work, he continues to take courses to further his own education. Carl is on his way to earning a bachelor's degree in business management.



Carl helps a SEED instructor prepare for class.



Students in Henan Province, China, complete an assessment administered by REAP to evaluate their vocational training school.

## Raising the standard of education.

After their primary education, many students in China attend vocational schools. To help make sure these schools are teaching students the skills they need to succeed, we created a school credentialing system in partnership with local government, Dell Inc., and Stanford University's Rural Education Action Program (REAP).

While Apple's supply chain only includes a small percentage of interns from these schools, results measured in 2015 suggest that the system leads to an increase in students' skills and a decrease in dropout rates.

Learn more about how Stanford University is helping educate children in China through [REAP](#).



This solar farm in Hongyuan, China, can generate enough clean energy to power all of Apple's corporate facilities and retail stores in China.

## Environment, Health and Safety

# Respecting the environments we work and live in.

Our suppliers' facilities can have a significant impact on the planet and the people who make our products. So we collaborate with suppliers to enforce strict environmental policies and protect workers with the right equipment and safety measures.

## Manufacturing with the world in mind.

Greenhouse gas emissions and pollution from manufacturing can have major environmental impacts. So we partner with our suppliers to implement programs to reduce their carbon footprint.

We replace outdated or inefficient heating, cooling, and lighting systems, repair compressed air leaks, and recover and redirect waste heat. In the first year of our energy efficiency program, improvements at 13 sites resulted in a reduction of over 13,800 metric tons of carbon emissions.

In addition to making facilities energy efficient, we explore ways to power them using cleaner and renewable sources. In 2015, we launched our Clean Energy Program to reduce carbon emissions across our supply chain, which makes up nearly three-quarters of Apple's total carbon footprint. In China alone, we're working with our suppliers to install more than 2 gigawatts of clean energy. Foxconn, our first partner, will create 400 megawatts of solar energy by 2018 — enough to power final production of iPhone at its Zhengzhou factory.

---

#1

Apple was named the top manufacturer among all brands by the [Institute of Public and Environmental Affairs \(IPE\)](#) in 2015.

---

13.8k

metric tons of carbon emissions reduced in 2015.

---

20m

metric tons of carbon emissions we expect to reduce in China by 2020.



A third-party auditor discusses a supplier's air handling equipment in Zhengzhou, China.

## Making products with fewer by-products.

In 2015, we launched a waste diversion program at 22 factories, including all final assembly facilities, to help suppliers reduce, reuse, or recycle. This includes reusing internal packaging, shipping packaging materials back to vendors for reuse, and limiting food waste from worker canteens. And when waste leaves our facilities, we're working closely with local governments to ensure that it's disposed of properly. To date, our efforts have diverted 73,773 metric tons of waste from landfills.

In July 2015, Foxconn Guanlan became our first supplier to recycle or responsibly dispose of all its production waste without using landfills. And in January 2016, after six months of 100 percent waste diversion, Guanlan was officially validated as a zero-waste facility.

---

73.7k

metric tons of waste diverted  
from landfills since 2015.



## Case Study

# Keeping waste out of landfills.

Foxconn Zhengzhou, one of our final assembly facilities for iPhone, was sending a large portion of its production waste to landfills every month. This represented a tremendous opportunity to lessen the impact of how we make our most popular product.

We partnered with Underwriters Laboratories, a third-party assessor, to help identify and classify the factory's various waste streams. We found that nearly 80 percent of the facility's total waste was generated by production, including inbound packaging from material vendors. Apple supplier responsibility team member Sharon Shu explains, "Each iPhone has more than 100 parts. And each part has multiple suppliers. Each needs packaging."

So local managers created a classification system to evaluate all these materials, boosting sorting efficiency and increasing recyclability. They also found ways to work more closely with parts vendors to better regulate shipments of inbound packaging, even getting some vendors to change the way they package their parts.

Together, they were able to divert 40 percent of Foxconn Zhengzhou's previously land-fill bound waste to recycling, and the remaining waste was repurposed to help generate power for local governments. And as of early 2016, Foxconn Zhengzhou is 96 percent landfill-free.

"It's a continuous effort," says Sharon. "And currently our goal is to make Foxconn Zhengzhou a zero-waste facility in 2016."



Component packaging trays are shredded and sent to another plant to be recycled.

## Making water-intensive processes more water conscious.

The water we use has a direct effect on the communities we operate in. In 2013, we started the Clean Water Program to reduce the use of freshwater in our suppliers' processes. We learned that 73 of our suppliers' facilities accounted for 70 percent of the top 200 suppliers' known total water use. And through baseline assessments, performance evaluations, technical support, and supplier training, we helped them save more than 3.8 billion gallons of freshwater. We're also increasing reuse and recycling of treated wastewater.



Water samples are tested for pollutants as part of our Clean Water Program.

---

# 3.8B

gallons of freshwater saved since 2013

## Safer facilities start with a specialized curriculum.

Across our supply chain, there's a shortage of people with adequate environment, health, and safety (EHS) skills. To ensure the safety of people working in our suppliers' facilities, we need to do more than provide basic safety precautions and procedures. So in 2013 we established the EHS Academy to address this shortage of EHS expertise by educating local managers on issues of environmental protection and air pollution, water and chemical management, and emergency preparedness and safety equipment.

Partnering with local universities and the Institute for Sustainable Communities, participants complete a rigorous 18-month EHS curriculum. In addition to their coursework, managers must create and implement real EHS projects to improve conditions at their local facilities. Participants have launched over 2460 of these environment, health, and safety projects since the EHS Academy was founded, with more than 1590 in 2015 alone.

---

# 265

participating sites since 2013.

---

# 1590+

EHS projects implemented since 2015.

---

# 310

EHS Academy graduates in 2015.

## Case Study

# Increasing Safety at Marian Suzhou.

As part of their coursework, EHS Academy students create and implement a real project to improve their local facility.

At our Marian Suzhou supplier facility, students in the machine safety course noticed safety gaps in how manufacturing machinery was developed, installed, and maintained.

“There are challenges. Machine vendors don’t always allow us access to the software behind them,” says Mark Stasney, president of Marian Suzhou. “So we add our own safety apparatus and safety interlocks.”



EHS Academy graduates discuss their latest safety project.

With the support of facility management, the local EHS team researched and created a machine life management system that added EHS checkpoints to different milestones across a machine’s life span. These included design, manufacture, acceptance, evaluation, regular monitoring, and disposal.

Now machine safety checks are a daily occurrence, and safety has become a top priority at Marian Suzhou. Workers at all levels of production are encouraged to speak up and alert EHS managers if safety risks arise.

With the new EHS system and daily safety routines in place, machinery-related injuries were reduced and new safety precautions have been enforced throughout the factory — including places where non-Apple products are made.

## Keeping restricted chemicals out of manufacturing processes and away from people.

Our Regulated Substances Specification (RSS) list was released in 2014 to identify the toxic chemicals we limit or prohibit in our manufacturing processes. We led audits that inventoried chemical purchasing and mapped chemicals across our supply chain to identify risk. And in 2015, 100 percent of process chemicals at all final assembly facilities (FATP) were free of Apple-prohibited substances. Now, we're working to identify these chemicals at our non-final assembly facilities (non-FATP).

In 2014, we committed to forming an advisory board to focus on chemicals. And this past year, Apple's Green Chemistry Advisory Board, a group of global experts, began spearheading research and exploring ways to replace restricted substances with greener alternatives.



A worker in Pathum Thani, Thailand, works with lead-free solder.

## Everyone should be prepared for emergencies.

We're helping our suppliers develop comprehensive emergency preparedness systems to protect workers in the event of a fire, earthquake, explosion, or other natural or occupational incident. We also implement regular site monitoring to ensure that our suppliers remain vigilant about these risks. We assessed 40 suppliers, covering about 1 million workers, in 2015 alone.



We require all our suppliers to follow our [Regulated Substances Specification \(RSS\)](#) list. Take a closer look at the chemicals our suppliers are prohibited and limited from using in manufacturing processes.

# 100%

of all 22 FATPs are free of Apple-prohibited substances

# 37

non-FATPs received chemical management assessments in 2015

# 58

supplier partnerships created to improve chemical processes



## Case Study

# Fire prevention at Ri Teng.

The Ri Teng facility in Shanghai, China employs about 20,000 people. When Ri Teng's day-to-day safety program started, there were few formal emergency procedures in place. But facility safety and emergency preparedness met government standards, including the requirement of two safety drills per year.

"After Apple's intervention, we decided that the standard needed to be higher than what the government set," says Light Tseng, Ri Teng's HR and EHS director. "So we raised the number of meetings and drills to once a month at each site." Ri Teng attended Apple's EHS Academy to design and implement fire safety and emergency preparedness projects. In addition, the facility significantly expanded its local EHS team to onboard more skilled talent. The team developed comprehensive emergency preparedness systems for storms, floods, earthquakes, and fires.

Having these systems in place proved especially important in 2015, when a faulty ventilation system caused a fire on the facility's exterior. Ri Teng's emergency response team evacuated all factory line workers in less than five minutes, and used extinguishing equipment and hydrants to contain the blaze until the local fire department arrived.

Following the fire, Ri Teng's EHS team switched from a plasma-based ventilation system to a water-based system to decrease the risk of fire. They also partnered with the local fire department to create an automated fire retardant foam pipeline for use within their ventilation system. And they increased the scope of participation in the facility's safety drills.



Workers take turns extinguishing controlled flames during a monthly fire drill.

## Safety equipment is a worker's most important tool.

Safety gear isn't safe for workers if it's used incorrectly. Through our supplier audits, we found a lack of understanding and awareness of proper use of personal protective equipment. So in 2015, we partnered with 3M to host workshops at supplier facilities. These workshops teach the proper way to fit and wear protective equipment like masks and respirators. Safety experts are also in attendance to answer questions, and workers can trade in their old equipment for new equipment.

---

206k

workers represented in  
workshops at 24 sites.



A worker learns how to wear protective equipment at a 3M workshop.

# 2016 Supplier Responsibility Report

## Audit Results

We hold suppliers accountable to the highest standards of social and environmental responsibility. When we uncover violations to our Code of Conduct, we partner with our suppliers to improve their performance. We give supplier partners the tools to correct issues and learn how to proactively prevent them from reoccurring. We are proud of the progress our suppliers are making and we remain firm in our commitment to continuously drive improvement.

During an audit, each facility is evaluated on more than 500 aspects of our Code of Conduct. Apple and third party auditors review hundreds of documents, conduct interviews with management and line workers, and physically inspect facilities. Our scoring methodology is strict, and suppliers rarely earn perfect scores. We consider situational findings — for example, temporary blockage of an emergency exit by an easily removable item such as a box, or a cracked exit sign— to be instances of non-compliance despite being relatively easy to correct.

The most egregious breach of compliance is a core violation. These include, for example, instances of underage or involuntary labor, document falsification, intimidation of or retaliation against workers participating in audit interviews, and significant environmental threats. If there is immediate risk to workers or the environment, we shut down facility operations until the problem is addressed.

Unique to Apple's auditing process is what happens after the audit. We develop customized corrective action plans with supplier management and work directly with key personnel from the facility and from our own Operations teams to correct violations within 90 days. We help suppliers learn better practices, and ultimately achieve sustained change. Higher risk suppliers requiring extra support are enrolled into our Partnership Program and receive dedicated assistance from Apple auditors to address Code of Conduct performance gaps. We take a holistic approach to technical assistance and management training. We help suppliers establish Responsibility teams, train leaders, and enhance internal monitoring and remediation.

We prioritize audits based on geographic and manufacturing process risks, prior audit scores, ability to correct previous issues, and concerns raised by Apple teams or external stakeholders. In 2015, we conducted 640 audits across our global supply chain — over 20 percent of which were first time audits. Facilities which were not previously audited by Apple typically score lower in their first audit and get better over time. We also regularly raise the bar on our Code of Conduct requirements, so facilities audited on a repeat basis may not meet the more stringent standards in any given year. As a result, even though a supplier has improved, their compliance scores may be lower year over year. Our goal remains to continuously improve conditions within each factory, not improve a number.

We know our work is never done. By holding suppliers accountable to the highest standards, and by partnering with them to make lasting change, we continue to drive responsibility throughout our global supply chain.

## Compliance Scores

Each year we strengthen our Standards, and bring more suppliers into our auditing process. Facilities in complete compliance, as reported below, meet Apple's highest standards of excellence, which is tough to achieve. The below scores indicate the percentage of our suppliers who have zero instances of material findings.

Even one cited violation is considered an instance of material non-compliance and the facility does not receive credit. We will continue working in partnership with the facilities that fall short of 100 percent compliance to help them improve.

Below is compliance information, examples of significant non-compliance findings, and more detailed information on all core violations.

## Labor and Human Rights

Category	Practices achieving complete compliance with Apple's standards of excellence	Management Systems achieving complete compliance with Apple's standards of excellence
Anti-Discrimination	86%	77%
Anti-Harassment and Abuse	96%	86%
Prevention of Involuntary Labor	91%	84%
Prevention of Underage Labor	96%	92%
Protected Classes Protections*	91%	90%
Working Hours **	97%	75%
Wages, Benefits and Contracts	66%	74%
Freedom of Association and Collective Bargaining	97%	91%
Grievance Mechanisms	84%	84%
<b>Overall</b>	<b>84%</b>	<b>84%</b>

\*Protected Classes Protections includes juvenile, student, foreign contract, pregnant or nursing, and disabled workers. The score for this category has been updated to include violations out of all facilities, not only facilities employing protected classes.

\*\* We gauge our process by tracking real time working hours weekly for over 1.3 million workers in our supply chain, publishing the data every month. As a result of this report, in 2015 our suppliers achieved an average of 97 percent compliance across all work weeks, and the average hours worked per week was under 48 for all workers, and 55 hours on average for those who worked at least 40 hours per week.

We continue to see significant progress on meeting our labor and human rights standards in our supply chain. And we continue to raise the bar. In 2015, we strengthened our dispatch labor audit criteria ahead of China's new 2016 law which states dispatch workers — those workers who have employment contracts with an agency but not directly with the factory — may not comprise more than 10 percent of a supplier's workforce. Even though the law did not go into effect until 2016, we preemptively audited suppliers one year ahead of the law's implementation for their workforce plans in this category, causing non-compliance in our Wages, Benefits and Contracts section.

Within the Prevention of Involuntary Labor and Human Trafficking category, we audit suppliers' management systems and practices in compliance, including, for example, no presence of bonded labor, verification of private employment agencies, recruitment fees and procedures, and adequate breaks. In 2015, we strengthened our requirements around involuntary labor such that allowable recruitment fees charged by private employment agencies went to zero, down from one month's net wages. Since 2008, our suppliers have repaid more than \$25.6M to workers for excessive recruitment fees.

In addition to finding one facility with underage labor in 2015, we found other instances of suppliers not complying with our requirements, including, for example, adequate ID and age verification systems and periodic visual inspections for potential underage workers.

## Labor and Human Rights Core Violations

### Prevention of Underage Labor

#### Code of Conduct Requirement

*Suppliers shall employ only workers who are at least 15 years of age or the applicable minimum legal age, whichever is higher. Suppliers may provide legitimate workplace apprenticeship programs for educational benefit that are consistent with Article 6 of ILO Minimum Age Convention No. 138 or light work consistent with Article 7 of ILO Minimum Age Convention No. 138.*

- Facilities found with underage labor: 1 out of 640 audits covering 1.6 million workers

#### Remediation Details

In 2015 we found one facility, which was audited for the first time, in violation of employing underage labor. The number of audited facilities with underage labor dropped to 1 in 2015 from 6 in 2014 despite nearly 20 percent of facilities audited being new to the process. There were 3 active cases of underage labor at this single facility. All three underage workers were 15 years old and the minimum age requirement is 16 years of age. Apple required the supplier to follow our strict underage labor remediation program by returning the worker to their home, financing education of their choosing, and providing income to the worker matching what they received while employed. We follow up regularly to check in on the worker and to ensure the supplier upholds their financial commitments. [Read more about our Prevention of Underage Labor program here.](#)



# Prevention of Involuntary Labor and Human Trafficking

## Code of Conduct Requirement

*Suppliers recruiting foreign contract workers either directly or through third party agencies shall be responsible for payment of all recruitment-related fees and expenses..*

- Facilities found with overcharges on workers' recruiting fees and expenses in excess of legal limits: 6 out of 640 audits covering 1.6 million workers

## Remediation Details

Charging recruitment fees to foreign contract workers, whether through their own recruiters or third party labor brokers, is a core violation. The small number of findings in this category were attributed to facilities audited for the first time. Apple required suppliers in violation to reimburse foreign contract workers in full, totaling US\$4.7 million in 2015 and US\$25 million since 2008. Hiring protocols were also implemented to prevent reoccurrence. We conducted 69 bonded labor focused investigations in 2015 and audited 100 percent of our top 200 facilities that had foreign contract workers.

## Health and Safety

Category	Practices achieving complete compliance with Apple's standards of excellence	Management Systems achieving complete compliance with Apple's standards of excellence
Health and Safety Permits	55%	55%
Occupational Health Safety and Hazard Prevention*	66%	55%
Emergency Prevention, Preparedness and Response	63%	65%
Incident Management and Medical Surveillance	77%	89%
Working and Living Conditions	88%	88%
<b>Overall</b>	<b>73%</b>	<b>66%</b>

\*Ergonomics and Health and Safety Communications have been incorporated into Occupational Health and Safety and Hazard Prevention.

Within Emergency Prevention, Preparedness and Response, we strengthened our requirements in 2015. For example, our previous standard of requiring emergency exit signs was updated to require that all emergency exit signs be lighted with battery back-up. Many suppliers were found non-compliant on this new requirement. Also, we began enforcing a requirement that emergency drills be conducted for all shifts. Although local law requires one fire drill per year, we require fire drills on both night and day shifts in production and dormitory areas twice per year. If a facility has adequate coverage for day shifts but not night shifts, the entire category is counted as full non-compliance. While suppliers are required to correct all violations through our aggressive Corrective Action Plan (CAP), these scores reflect the issues found at the time of the audit.

The vast majority of our suppliers have most of the legally required health and safety permits. In some facilities, this can mean up to 100 or more individual permits and certificates, and in order to achieve compliance with this section, suppliers need to be in possession of 100 percent of fully approved and valid permits and certificates. In 2015, we found many instances where suppliers were actively engaged in the process of renewing or obtaining some of their required permits, but because they were not in possession of all valid physical permits or certificates, we deemed them non-compliant. For example, if a supplier is in process of renewing or obtaining a necessary certificate for a technical operator, but possesses all other required permits for the facility, the supplier is still deemed non-compliant. We also found instances where suppliers needed to apply for additional permits due to new production processes or recently introduced equipment. Because procedures for obtaining some permits can be lengthy, we continue working closely with our suppliers to push for full legal adherence with permit requirements.

Through our detailed audit processes, we found occurrences of non-compliance with our strict standards in Occupational Health and Safety Hazard Prevention. For example, we found facilities without proper controls such as appropriate storage containers or correct lid closures for hazardous chemicals, or Lockout/Tagout (LOTO) systems. While not required by law, Apple requires LOTO systems — a lock and tag control system applied, for example, to a machine under maintenance to prevent a worker from accidentally starting the machine. We also discovered personal protective equipment issues such as incorrect or missing masks or safety shoes. All suppliers were required to correct these issues.

## Environment

Category	Practices achieving complete compliance with Apple's standards of excellence	Management Systems achieving complete compliance with Apple's standards of excellence
Environmental Permits	65%	65%
Hazardous Substance Management and Restriction	68%	76%
Non-Hazardous Waste Management	82%	95%
Wastewater Management	82%	83%
Stormwater Management	80%	65%
Air Emissions Management	74%	80%
Boundary Noise Management	88%	86%
Pollution Prevention and Resource Reduction	91%	91%
<b>Overall</b>	<b>76%</b>	<b>82%</b>

We have seen significant progress in environmental focus from our suppliers. Permitting remains an issue that we monitor closely. We found many instances where suppliers were in the process of obtaining required permits but were not in possession of them, and this often broadly impacts compliance. Within Air Emissions

Management, the low score in this category is primarily related to inadequate labeling of equipment based on legal requirements, even if the facility is monitoring emissions. Within the category of Hazardous Substance Management and Restriction, the largest contributor to non-compliance was inadequate labeling. We require thorough and real time record-keeping of incoming substances, storage and accurate labeling of substances, and outbound waste. Even one worn out label on a stored substance can count as an instance of non-compliance. All suppliers were required to correct these issues.

## Environment Core Violations

### Air Emissions Management

#### Code of Conduct Requirement

*Suppliers shall identify, manage, reduce, and responsibly control air emissions emanating from its operations that pose a hazard to the environment. Suppliers shall conduct routine monitoring of the performance of its air emission control systems.*

- Facilities releasing waste air without treatment: 6 out of 640 audits

#### Remediation Details

Violations in this category were attributed to lack of monitoring or treatment installation. All violating sites were mandated to suspend production lines that generated untreated waste air. Treatment equipment was installed to filter discharged air, and air monitoring protocols were put in place to ensure emissions were in compliance with legal requirements.

### Wastewater and Stormwater Management

#### Code of Conduct Requirement

*Suppliers shall monitor, control, and treat wastewater generated from operations as required by applicable laws and regulations before discharge.*

- Facilities directly discharging waste water into storm pipe: 2 out of 640 audits

#### Remediation Details

All polluting processes were suspended at the facilities found with this violation. Wastewater collection and treatment measures were implemented by these facilities, including installation of wastewater pipeline systems. Apple's Clean Water Program aims to further address issues related to water pollution. [Read more about the Clean Water Program here.](#)

## Ethics\*

Category	Management Systems achieving complete compliance with Apple's standards of excellence
Business Integrity	94%
Disclosure of Information	98%
Whistleblower Protection and Anonymous Complaints	93%
Protection of Intellectual Property	96%
<b>Overall</b>	<b>95%</b>

\*These categories have been updated to reflect the strengthening of our standards to evaluate factory-wide management systems

## Ethics Core Violations

### Disclosure of Information

#### Code of Conduct Requirement

*Suppliers shall accurately record and disclose information regarding their business activities, structure, financial situation, and performance in accordance with applicable laws and regulations and prevailing industry practices.*

- Facilities providing falsified attendance, payroll, or working hours records: 13 out of 640 audits covering 1.6 million workers

#### Remediation Details

Apple immediately placed the violating suppliers on probation. We required authentic records be provided in order to successfully complete the audit. Management systems were reviewed to assess ethics policies and communication strategies. Additionally, Apple views falsification of records as a serious offense and reviews each case for potential impacts on awarding business.

For more information about Apple's Supplier Responsibility Program, visit [www.apple.com/supplier-responsibility](http://www.apple.com/supplier-responsibility).

© 2016 Apple Inc. All rights reserved. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. Other product and company names mentioned herein may be trademarks of their respective companies. This report is published annually and covers calendar year 2015 activities. January 2016